EXHIBIT 6

UNITED STATES DISTRICT COURT

EASTERN DISTRICT OF TEXAS

MARSHALL DIVISION

ARIGNA TECHNOLOGY LIMITED, Case No.

Plaintiff, 2:21-CV-0054-JRG-RSP

vs.

VOLKSWAGEN AG et al.,

Defendants.

_____

REMOTE VIDEOTAPED DEPOSITION OF

CARL SECHEN, PH.D.

September 20, 2021

1:41 p.m. CST

Reported by:

Janice M. Kocek, CSR, CLR

Job No. 50895

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The remote videotaped deposition of CARL SECHEN, PH.D., called by the Defendants for examination, pursuant to the Federal Rules of Civil Procedure for the United States District Courts pertaining to the taking of depositions, reported stenographically by Janice M. Kocek, CSR, CLR, commencing at the hour of 1:41 p.m. CST on the 20th day of September, 2021.

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A P P E A R A N C E S:
** ALL PARTIES APPEARING REMOTELY **

ON BEHALF OF THE PLAINTIFF ARIGNA TECHNOLOGY LIMITED:
SUSMAN GODFREY LLP
1201 Third Avenue, Suite 3800
Seattle, Washington 98101-3000
206.516.3880
BY: ANDRES HEALY, ESQ.
ahealy@susmangodfrey.com
DANIELLE NICHOLSON, ESQ.
dnicholson@susmangodfrey.com

ON BEHALF OF THE DEFENDANTS VOLKSWAGEN AG AND VOLKSWAGEN GROUP OF AMERICA, INC.:
FINNEGAN HENDERSON FARABOW GARRETT & DUNNER, LLP
1875 Explorer Street, Suite 800
Reston, Virginia 20190-6023
571.203.2700
BY: ELLIOT C. COOK, ESQ.
elliot.cook@finnegan.com
DANIEL M. JORDAN, ESQ.
dan.jordan@finnegan.com

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A P P E A R A N C E S: (Continued)

ON BEHALF OF DEFENDANTS BMW OF NORTH AMERICA, LLC AND BAYERISCHE MOTOREN WERKE AG:
FINNEGAN HENDERSON FARABOW GARRETT & DUNNER, LLP
1875 Explorer Street, Suite 800
Reston, Virginia 20190-6023
571.203.2700
BY: BRADFORD C. SCHULZ, PH.D., ESQ.
bradford.schulz@finnegan.com
-and-
Stanford Research Park
3300 Hillview Avenue, 2nd Floor
Palo Alto, California 94304-1203
650.849.6600
BY: SNEHA NYSHADHAM, ESQ.
sneha.nyshadham@finnegan.com

ON BEHALF OF DEFENDANT GENERAL MOTORS LLC:
QUINN EMANUEL URQUHART & SULLIVAN, LLP
1300 I Street NW, Suite 900
Washington, DC 20005
202.538.8000
BY: MARISSA R. DUCCA, ESQ.
marissaducca@quinnemanuel.com

5

A P P E A R A N C E S: (Continued)

ON BEHALF OF DEFENDANTS NISSAN NORTH AMERICAN, INC., AND NISSAN MOTOR COMPANY, LTD.:
SHOOK HARDY & BACON LLP
2555 Grand Boulevard
Kansas City, Missouri 64108-2613
816.474.6550
BY: MARY J. PEAL, ESQ.
mpeal@shb.com

ON BEHALF OF DEFENDANTS MERCEDES-BENZ USA, LLC AND DAIMLER AG:
HOGAN LOVELLS US LLP
Columbia Square
555 Thirteenth Street, NW
Washington, D.C. 20004
202.804.7859
BY: YI (SALLY) ZHANG, ESQ.
yi.zhang@hoganlovells.com

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A P P E A R A N C E S: (Continued)

ON BEHALF OF DEFENDANTS ADC AUTOMOTIVE DISTANCE CONTROL SYSTEMS GMBH & CONTI TEMIC MICROELECTRONIC GMBH AND CONTINETNAL AG:

RATNERPRESTIA
2200 Renaissance Boulevard, Suite 350
King of Prussia, Pennsylvania 19406
610.407.0700
BY: CHRISTOPHER H. BLASZKOWSKI, ESQ.
cblaszkowski@ratnerprestia.com

ON BEHALF OF THE DEFENDANTS TESLA MOTORS TX, INC. AND TESLA INC.:

COOLEY LLP
1299 Pennsylvania Avenue NW, Suite 700
Washington, DC 20004
202.842.7800
BY: ADAM PIVOVAR, ESQ.
apivovar@cooley.com

ALSO PRESENT:

JOE TOWNSEND, Legal Videographer

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THE VIDEOGRAPHER: Here begins the videotaped deposition of Carl Sechen taken in the matter of Arigna Technology Limited v. Volkswagen AG, et al., in the United States District Court for the Eastern District of Texas, Marshall Division, Case No. 2:21-cv-00054-JRG-RSP.

Today's date is September 20th, 2021. The time is 1:41 p.m. Central. This deposition is being held remotely via Zoom videoconference.

The court reporter is Janice Kocek. I am Joe Townsend, the video camera operator. We're both here on behalf of Henderson Legal Services.

Would counsel and others, please, introduce themselves and state whom they represent.

MR. HEALY: My name is Andres Healy. I represent Arigna Technology Limited. I'm here on behalf of Arigna and the witness, Dr. Sechen.

MR. COOK: Good afternoon. This is Elliot Cook from the law firm of Finnegan on behalf of the two Volkswagen defendants.

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And also with me on the line on behalf of Volkswagen, we have Dan Jordan. I'll leave it to the other defense counsel, please, to introduce themselves.

MS. DUCCA: This is Marissa Ducca from the law firm Quinn Emanuel Urquhart & Sullivan on behalf of GM LLC.

MR. BLASZKOWSKI: This is Chris Blaszkowski of RatnerPrestia on behalf of the Continental defendants.

MR. SCHULZ: This is Bradford Schulz of the Finnegan law firm representing the BMW defendants. And also with me is Sneha Nyshadham. She's also with BMW as well.

MS. PEAL: This is Mary Peal from Shook, Hardy & Bacon on behalf of the Nissan defendants, Nissan North America, Nissan Motor Company.

MR. COOK: Anybody else?

MS. ZHANG: This is Yi Zhang from Hogan Lovells representing Daimler AG and Mercedes-Benz USA.

MR. PIVOVAR: This is Adam Pivovar of the Cooley LLP law firm on behalf of the Tesla defendants.

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Q. Is capacitor C1 not directly connected to 4 and L1?

MR. HEALY: Object to the form.

THE WITNESS: Well, certainly it's connected, as I've defined "connected." But is it directly connected? No, there's -- you know, there's an intermediate component. You wouldn't say C1 is directly connected to L1 because there's this wire going off to 4. And so there's not -- the current is diverting -- somewhere on the current is diverting there.

BY MR. COOK:

Q. And at the top end of C1, is it your opinion that C1 is not directly connected to point 1 and L4 or is that an indirect connection?

MR. HEALY: Object to the form.

THE WITNESS: Well, technically -- I mean, first of all, according to my definition, they are connected. You know, C1 is connected to both 1 and L4. But it's technically an indirect connection.

BY MR. COOK:

Q. Sir, next I'd like to please take a look at Figure 1 of the '318 patent. So this is

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Exhibit 3, please.

Please let me know when you're there.

A. Yeah, I have it.

Q. In terms of Figure 1, do you see the ground coming off of the top of resistor 12?

A. Yes.

Q. What is typically the voltage of a ground?

A. Well, for DC it would be zero volts. But you know, usually that's what it, you know, typically is. But for AC it can be anything, any fixed voltage.

Q. According to the '318 patent, does Figure 1 utilize DC or AC voltage sources?

A. Well, you know, again, I -- I would say it's a -- as I use the dictionary definition and that's consistent with my teachings and -- it's affixed voltage. That -- therefore, it's an AC ground. And it's a fixed reference voltage. And if you look at Figure 2, you can see that, you know, they want the voltage to -- at X to be really close to zero. And if you make that top of resistor 12 exactly zero, you can't really achieve that. You know, you can't really get X really close to zero.

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So -- you know, so a POSITA would know that, you know, you'd probably be better off slightly -- at least slightly above zero at the top of 12. At least slightly. And furthermore, any curve in Figure 2 between the second embodiment and first embodiment would be, first of all, substantially better than the background art. So --

Q. Go ahead.

A. So anyway, you know, the teaching is that is -- is clear that any voltage at the top of 12 that's appreciably less than what the prior art would use would be a big improvement.

Q. In Figure 2, what does the dashed line representing?

A. You mean the box 22?

Q. I'm sorry. So in Figure 2, sir.

A. Figure 2. Zero volts?

Q. Yes.

What is that representing?

A. That they would like the voltage at X to be as high as zero for the first embodiment.

Q. Does that indicate to you that the grounds above resistor 12 would be zero volts according to Figure 2?

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A. No, because you couldn't get zero at X if that was ground because that resistor would have to be, you know, milliohms or something, like super tiny, and then you wouldn't get any dynamic range on the voltage X to get to the bottom of the varactor. So it wouldn't work. And now, if you put a bigger resistor at 12, you get range but then the current would have to be so tiny so you still get zero volts at X that the transistor would not be on. So you know, if you want to achieve the curve that's the bottom last one on Figure 2, the bottom-most one, you're really going to have to have a voltage there at -- at the top of 12 that's a little bit above zero, to be honest.

Q. Are there any specific examples in the '318 patent of a non-zero ground -- a non-zero voltage ground?

MR. HEALY: Object to the form.

Sorry. Object to the form.

My box didn't light up again.

THE WITNESS: It's not stated. And like I said, that ground symbol is also used universally for AC ground. And that represents any power supply.

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So you know, it -- and again, a person of ordinary skill in the art would -- would -- would just know from looking at Figure 2 and the topology of Figure 1 that a voltage at the top of 12 would be better off to be above zero.

BY MR. COOK:

Q. I'm going to introduce next Exhibit 7.

(Sechen Deposition Exhibit 7 was marked for identification.)

BY MR. COOK:

Q. And, sir, please let me know when you see Exhibit 7.

A. Okay. I have it.

Q. Okay. Can you please take a look at -- this is page 3 of the PDF, page 327 of the document.

Do you see that?

A. Yes.

Q. And there's a definition on the right of "grounds."

Do you see that definition -- or several definitions?

A. Yes.

Q. Now, looking at the second definition

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that's not highlighted here, the second definition reads (as read): The voltage reference point in a circuit. There may or may not be an actual connection to earth, but it is understood that a point in the circuit said to be at ground potential could be connected to earth without disturbing the operation of the circuit in any way.

Do you see that?

A. Yes, I see that.

Q. So what is generally understood as the actual voltage of earth in this context?

A. Well, as I said, there is the notion of a DC ground and then there's the notion of an AC ground. And they -- and they both are quite reasonable things. An AC ground just means that there's no sinusoidal variation in -- in the voltage. So any fixed voltage. And so it's, yeah, definitely a reference point.

Q. What is the typical voltage of ground literally in this context?

MR. HEALY: Object to the form.

Sorry. Object to the form.

I can't tell if you heard me twice. I apologize if you did.

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THE WITNESS: I mean, I -- I mean, AC ground can be anything. You know, it could be 15 volts. It could be 10 volts. DC ground can usually be zero. But it -- you know, you don't know from just looking at a circuit necessarily what they're talking about.

BY MR. COOK:

Q. And so focusing on the term "earth" here in this definition No. 2, what is the commonly understood voltage of earth?

A. Well, actually, that's the reference potential. You know, a voltage means nothing, right? It's a two-terminal concept. It's the -- it's the -- voltage needs a reference. Current doesn't, though. You know, if you say there's so many amps flowing, that's what it is. This is why, you know, you can jump up and grab onto a 600 volt line and you're totally okay unless your foot touches ground. Then you're not okay. So you know, you need that reference. And the reference can actually be anything and the circuit's fine. In other words, you can raise all DC voltages by one volt in a circuit and nothing will change, almost.

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Q. Is it fair to say that the actual voltage potential of earth literally is generally understood to be zero volts or near zero?

MR. HEALY: Object to the form.

THE WITNESS: Well, I mean, it's just a reference. And I -- you know, it's really not correct to say it's zero volts because that's saying that there's no difference between ground potential and -- and -- and something else. But what's the something else? Because remember, volts is from one terminal to another terminal.

BY MR. COOK:

Q. Now, if we -- can you please take a look, sir, at Figure 1 of the '318 patent.

A. Yes.

Q. Now, the output of circuit 22 at point X, what is the output of circuit 22 at point X supposed to be?

A. Well, you want it to vary like from fairly low but not too high because if you make it too high, the capacitor 6, which is a reverse bias diode, it will forward bias if you make that too high. So that was the -- the gist of what they're trying to do here is to get X lower. And

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-- and so -- so the lowest figure on Figure 2 is -- you know, they want to shift that figure way lower.

But a person of ordinary skill would look at this and go, gee, anything between the bottom curve and, say, halfway to the second embodiment would be really good as well, maybe better. And so -- because putting it right at zero, you're -- you're not -- you're -- you're always going to be negative and possibly substantially -- somewhat substantially so.

Q. Now, if the ground above resistor 12 was an AC grounds, would that have an effect -- would that have an effect on the voltage at point X?

A. Well, it -- it would be quite fine. You know, you would want that to be an AC ground at the top of 12 in any event.

Q. Would an AC ground at the top of resistor 12 have any effect on the voltage at point X?

A. Not the fact that it's AC ground, no.

Q. If the ground above resistor 12 was an AC ground, would that cause the voltage at point X to alternate?

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A. No.

Q. If we replaced all three grounds shown in Figure 1 with AC grounds, would that affect the voltage at point X?

A. No, because -- yeah, it's -- there's no variation. So that's fine.

Q. Does the '318 patent provide any specific teaching on an AC grounds?

A. Well, it's a very common concept for analog circuits. And this certainly has an element of analog circuit design in it.

MR. COOK: Why don't we do this, Doctor, let's do a ten-minute break this time if that works for you. And we can come back on and see where we are.

THE WITNESS: Okay.

THE VIDEOGRAPHER: Going off the record at 4:55 p.m.

(Whereupon, a recess was taken from 4:55 p.m. to 5:06 p.m.)

THE VIDEOGRAPHER: Back on the record at 5:06 p.m.

MR. COOK: Dr. Sechen, I appreciate your time today. Unless there's anything from your counsel, that's all the defendants have for now. So thank you.

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THE WITNESS: Okay. All right. Thanks.

MR. HEALY: Nothing from my side. Thank you, Dr. Sechen.

THE WITNESS: Okay. All right. I guess I'll just log out then.

MR. HEALY: Yeah. I think you're done. Thank you very much, Dr. Sechen.

THE VIDEOGRAPHER: We're off the record at 5:07 p.m.

(Time concluded: 5:07 p.m.)

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STATE OF ILLINOIS)
) SS:
COUNTY OF COOK)

I, Janice M. Kocek, CSR, CLR, No. 084-002871, do hereby certify:

That the foregoing remote deposition of CARL SECHEN, PH.D., was taken at the time and place therein set forth, at which time the witness was put under oath remotely by me;

That the testimony of the witness and all objections made at the time of the examination were recorded stenographically by me, were thereafter transcribed under my direction and supervision, and that the foregoing is a true record of same.

I further certify that I am neither counsel for nor related to any party to said action, nor in any way interested in the outcome thereof.

IN WITNESS WHEREOF, I have subscribed my name this 26th day of September, 2021.

_____
JANICE M. KOCEK
CSR NO. 084-002871

ACKNOWLEDGMENT OF DEPONENT

I, _____, do hereby acknowledge that I have read and examined the foregoing testimony, and the same is a true, correct and complete transcription of the testimony given by me, and any corrections appear on the attached Errata Sheet signed by me.

_____ _____

(DATE) (SIGNATURE)

NOTARIZATION (If Required)

State of _____

County of _____

Subscribed and sworn to (or affirmed) before me on this _____ day of _____, 20____, by _____, proved to me on the basis of satisfactory evidence to be the person who appeared before me.

Signature: _____

(SEAL)